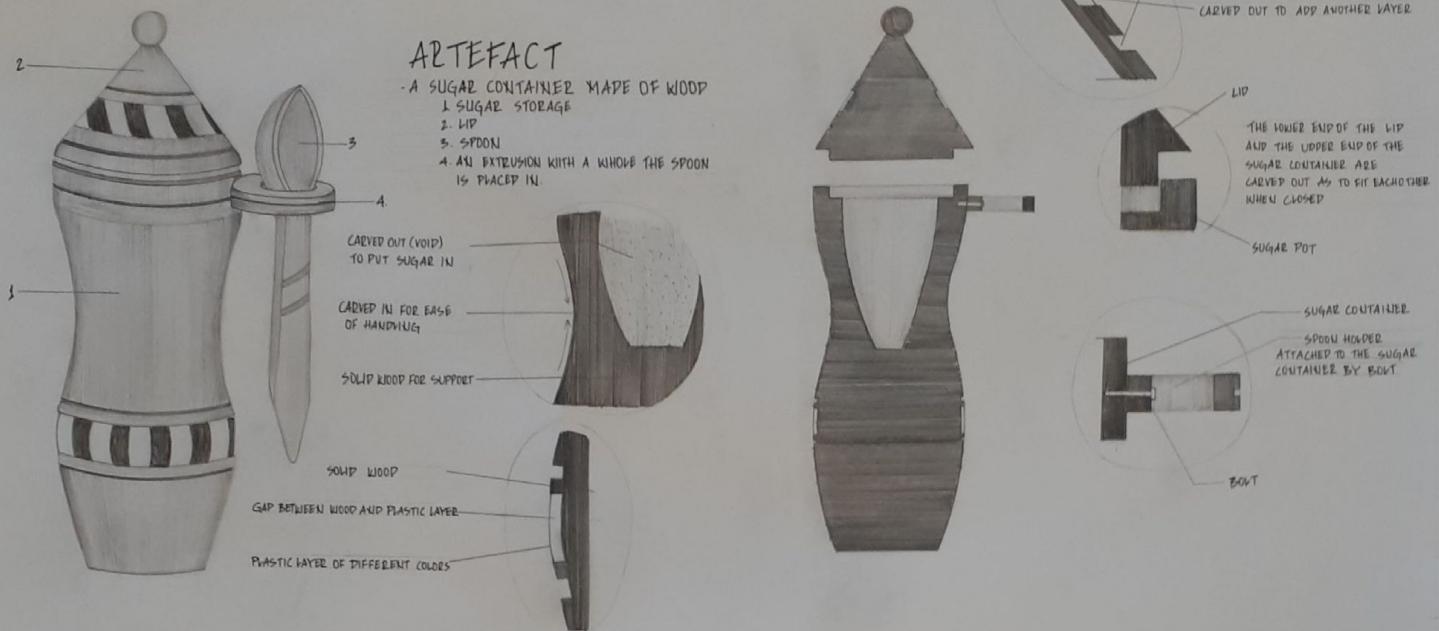


ANALYSIS

TELAYNEH STUDIO



TECHNIQUE

CARVING

CARVING IS THE ACT OF USING TOOLS TO SHAPE SOMETHING FROM A MATERIAL BY SCRAPPING AWAY PORTION OF THAT MATERIAL. THE TECHNIQUE CAN BE APPLIED TO MATERIALS LIKE WOOD AND STONE THAT ARE SOLID ENOUGH TO HOLD A FORM EVEN WHEN PIECES HAVE BEEN REMOVED, YET SOFT ENOUGH FOR PORTIONS TO BE SCRAPPED AWAY.

- PROCESS
1. SELECTION
 2. DRILLING
 3. GRINDING
 4. BORING
 5. CARVING
 6. DRIVING
 7. SMOOTHING
 8. PAINTING AND VARNISHING

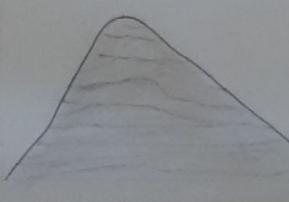
MATERIAL STUDY

WOOD/TIMBER

- STRONG IN COMPRESSION AND TENSION
 - WITHSTANDS FORCES THAT STRETCH THE MATERIAL
 - DECORATIVE MATERIAL (HAS ITS OWN COLOR, TEXTURE, AND DESIGN)
 - EASY TO BE CARVED OUT, CUT, GLUED AND NAILED
 - COEFFICIENT OF EXPANSION OF WOOD IS VERY LOW.
 - STRONGEST DIRECTION → GRAIN (PARALLEL)
- PERFORMANCE REQUIREMENTS CAN BE ACCOMPLISHED BY SELECTING AN APPROPRIATE GRADE, SPECIES AND TREATMENT

SITE ANALYSIS

TOPOGRAPHY



MOUNTAINOUS

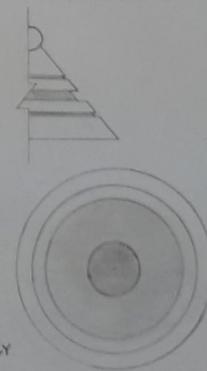
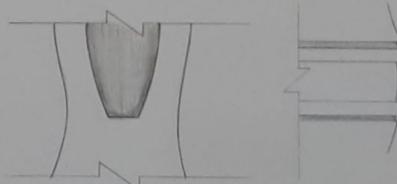
CLIMATE ANALYSIS

- TEMPERATURE - VERY HOT DURING THE SUMMER (40%)
COLD WINTER IN SOME REGION (1-5%)
- HUMIDITY AND PRECIPITATION - VERY LOW!
~ 10° SSCHM PER yr
- SUN - LONG SUNNY SUMMER AND HIGH RADIATION
- WIND - DRY WIND (NORTH)
- DUST STORMS
- FAUNA - SMALL ANIMALS, SCARCE
- SNAKE, SCORPION
- FLORA - SCARCE, PLANTS WITH THIN NEEDLE LEAVES

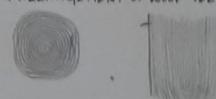
CONCEPTION

MATERIAL

1. DIFFERENT EXPOSURE CREATED
2. FORMS OF DIFFERENT SIZES OF DEPTH



- TECHNIQUE - CARVING ENABLES CREATING DIFFERENT SIZE AND DEPTH
MATERIAL - GRAIN ARRANGEMENT OF WOOD VERTICALLY AND HORIZONTALLY



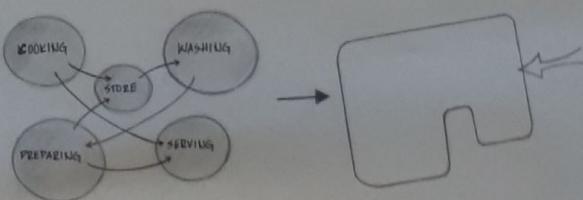
CONCEPT - DEPTH THESIS STATEMENT

IF THE WORKABILITY OF WOOD ENABLED US TO CREATE AN ARTEFACT OF DIFFERENT CURVATURES AND DEPTH, THEN WE CAN BUILD A COMPACTED KITCHEN WITH DIFFERENT EXPOSURE TO THE SURROUNDING.

PROJECTION

GENERIC KITCHEN ACTIVITIES

- COOKING
- PEPPING
- WASHING
- STORING
- SERVING



MUTATION

PROGRAM

TIHLO HAS THREE MAIN PARTS. I.E.

- DOUGH
- STEW/SAUCE
- CREAM

DOUGH MAKING PROCESS (PREPARING)

- ADD "BESO"/TIHLO ONTO A BOWL
- ADD WATER
- MIX THE BESO WITH WATER UNTIL IT IS SOFT AND SMOOTH
- MAKE THE MIX INTO A SMALL BITE

SAUCE MAKING PROCESS (COOKING)

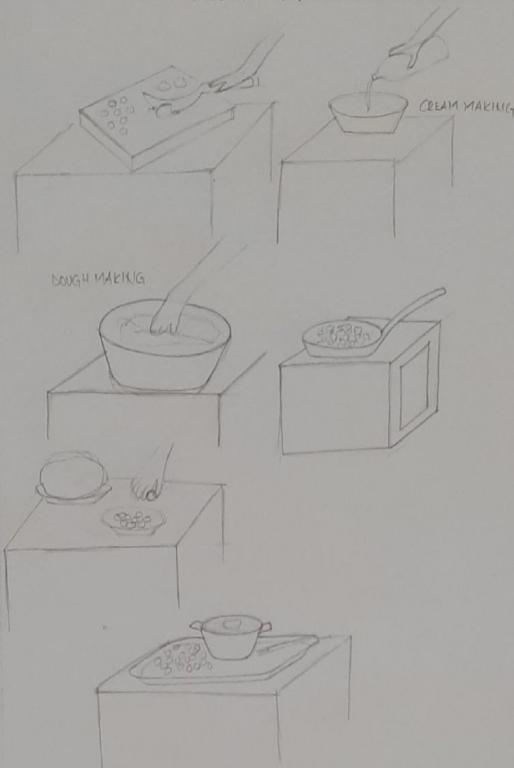
- ADD ONION AND OIL/BUTTER INTO THE COOKING PAN
- COOK IT UNTIL IT TURNS GOLDEN BROWN
- THEN ADD "BIRBEE"
- COOK THE MIX FOR 1½ HRS. WHILE DROPPING A LITTLE WATER
- COOK THE CHOPPED CUT MEAT WITH A DROP OF OIL, AND GARLIC AND GINGER
- ADD THE WELL COOKED MEAT INTO THE SAUCE
- COOK IT UNTIL IT IS MARINATED WELL
- ADD BLACK PEPPER AND SALT AND DROP A LITTLE WATER

CREAM MAKING PROCESS (PREPARING)

- ADD "ADEA" INTO A BOWL
- ADD "BESO"/TIHLO, "ABISH", "BIRBEE", AND SALT
- AND MIX THESE INGREDIENTS WELL UNTIL THE MIX BECOMES CREAMY

THE FINAL STEP IS BRINGING THESE PARTS TOGETHER
TO BE SERVED

MOTION



MAIN ACTIVITIES

- PREPARING 1 (MAIN PREPARING)
- COOKING
- WASHING
- FINAL PREPARING (PREPARING 2)
- STORING
- SERVING

ACTIVITIES ARRANGED IN DECREASING ORDER OF APPROXIMATE AREA REQUIRED

1. MAIN PREPARING
2. COOKING
3. WASHING
4. SERVING
5. FINAL PREPARING
6. STORE → DISTRIBUTED THROUGHOUT THE ACTIVITIES

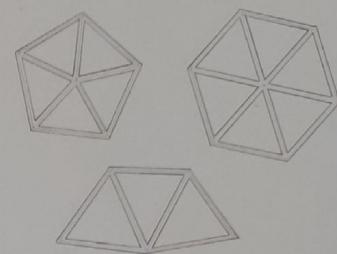
STRUCTURE

STRUCTURAL COMPONENTS

- COLUMNS
- LOAD BEARING WALL
- FOUNDATION
- CURVED SUPPORT
- ROOF STRUCTURE MADE OF POLYGONS THAT JOIN TOGETHER TO MAKE A DOME

WHY DOME?

- TO RESIST NATURAL DISASTERS.
- THE INTERLINKED TRIANGLES GIVE THE STRUCTURE ITS STRENGTH.
- LIGHT WEIGHT AND STRONG
- NO NEED FOR INTERIOR SUPPORT. THEREFORE GIVES KIDER SPACE
- ADDITIONAL OUTDOOR SPACE WHICH RESULTS IN ADDITIONAL PROGRAM.

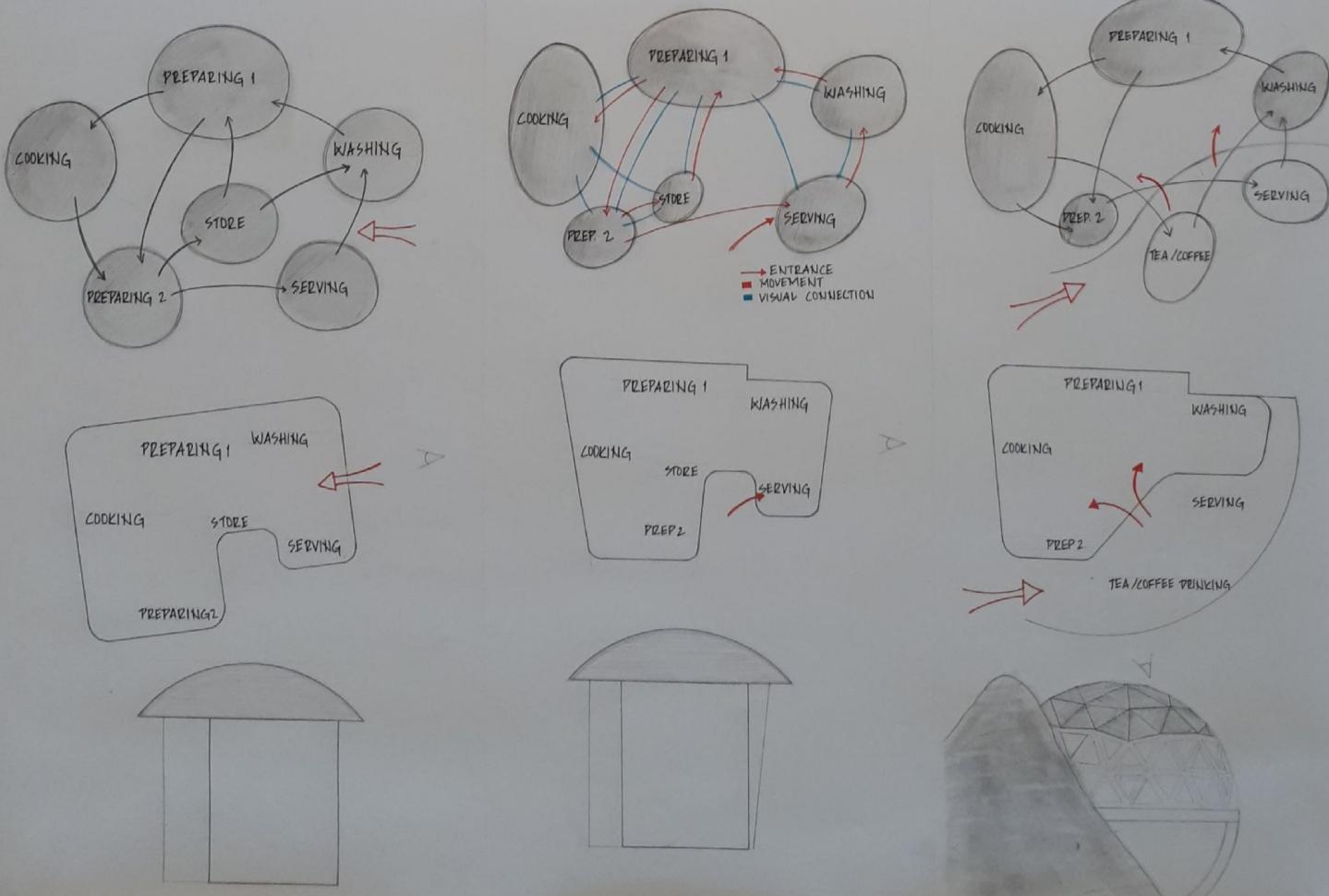


ADDITIONAL PROGRAM

TEA/COFFEE ACTIVITIES

- COFFEE → WASHING
- ROASTING
- GRINDING
- BOILING
- SERVING

- TEA → BOILING
- SERVING

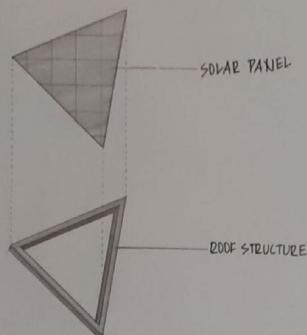


BUILDING SYSTEM

ELECTRICITY

BY UTILIZING THE ABUNDANT SUN ENERGY PRESENT IN OUR SPECIFIC CLIMATIC CONDITION, OUR SPACE GETS THE REQUIRED ELECTRICAL ENERGY FROM SOLAR PANELS PLACED ON THE ROOF.

THE ROOF STRUCTURE CAN BE CLADDED BY PHOTOVOLTAIC MODULES.



THE DOME CAN BE CLADDED AT DIFFERENT PLACES ENABLING US TO CAPTURE THE SUN AT ANY GIVEN TIME OF THE DAY.

ESTIMATED ELECTRICITY USAGE OF CLIENT:

REFRIGERATORS/5W : 2500W/DAY

STOVE/OVEN: 1200W X 5 = 3600W/DAY

LED BULB/50 WATT: 15W X 4 BULBS X 12 hrs = 624W/DAY

TOTAL: 7000 ± 300 W/DAY

$$1m^2 \times 10^7 \text{ m}^2 \times 10000 \text{ W/m}^2 \times 10 \text{ hrs} = 1000 \text{ kW/DAY}$$

$$\# \text{ OF PANELS NEEDED} = 7000 / 1000 = 7$$

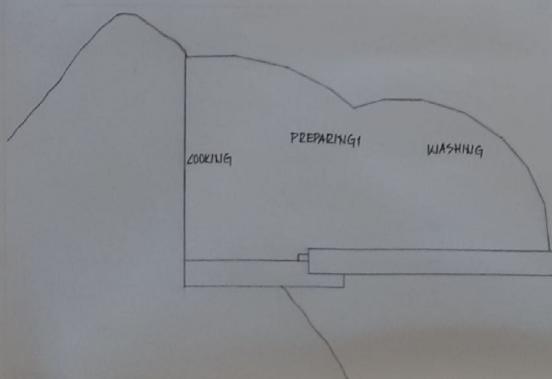
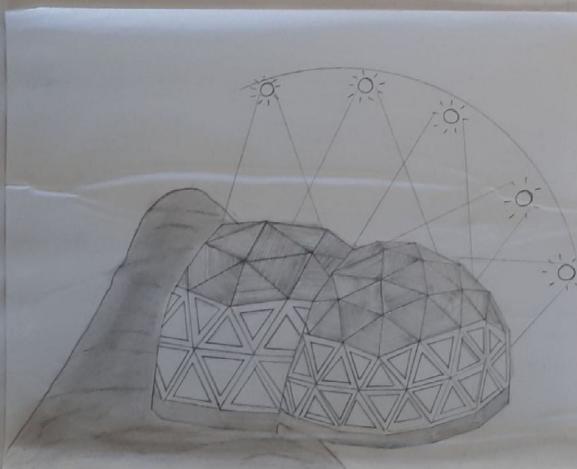
LIGHT AND VENTILATION

LIGHT ENTERS THE KITCHEN 1. WINDOWS PLACED AT DIFFERENT SIDES

2. OPENING GLASS PLACED ON THE ROOF STRUCTURE

MOREOVER, WE USED TWO DOMES JOINED TOGETHER TO EXPOSE THE KITCHEN TO SUNLIGHT AT DIFFERENT TIMES OF THE DAY.

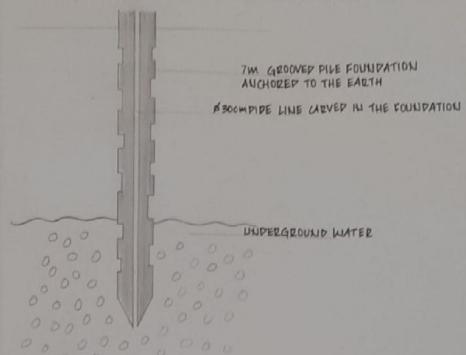
VENTILATION - WE CREATED SPACES OF DIFFERENT HEIGHT BY USING DOMES OF DIFFERENT RADIUS.
• THE GAP BETWEEN THE CEILING AND THE NON LOAD BEARING WALL ALSO SERVES FOR VENTILATION.



WATER SYSTEM

MAIN ISSUE IN A HOT AND DRY CLIMATE IS LACK OF WATER. THE ANNUAL PRECIPITATION IN A HOT AND DRY CLIMATE IS LESS THAN

THEFORE WE CAN UTILIZE THE ALREADY EXISTING UNDERGROUND WATER BY CREATING A PIPE LINE IN THE PILE FOUNDATION



BY USING WIND VANE PUMP TO PUMP OUT WE COULD FILTER AND USE THE WATER.



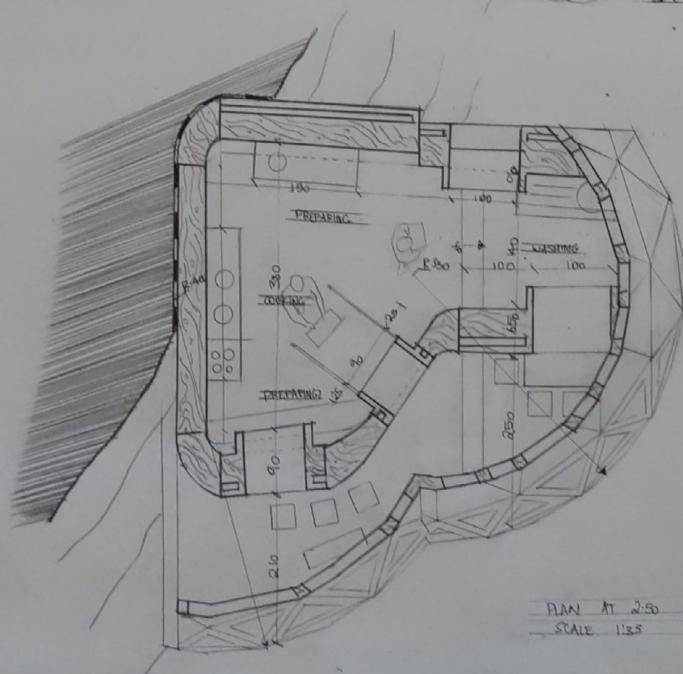
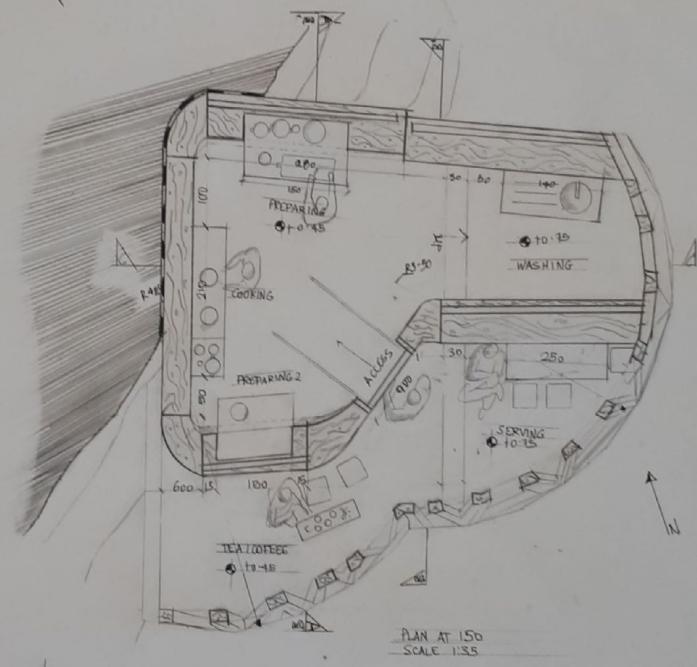
ESTIMATED WATER USAGE OF CLIENT

WASHING: 50 litres/DAY

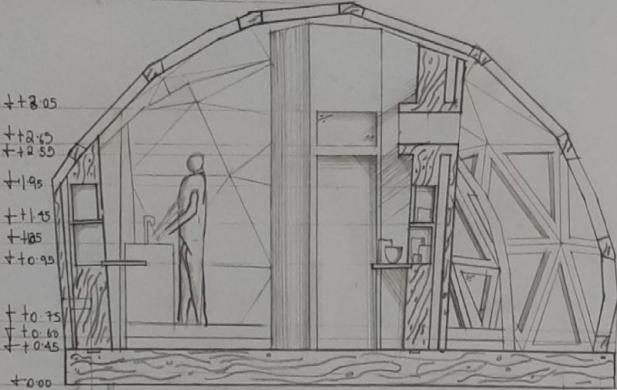
COOKING = 3 litres/DAY

TOTAL = 35 litres/DAY

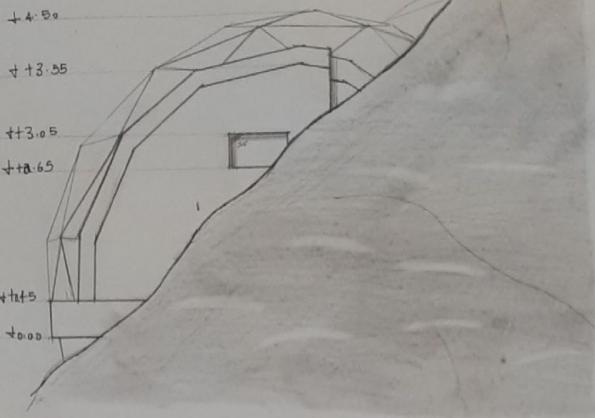
AVERAGE WATER PUMPED/DAY BY A 30CM DIAMETER WIND VANE
AT 1M HEIGHT AND WIND SPEED OF 1.5M/S = 35 litres/DAY



+ +4.50



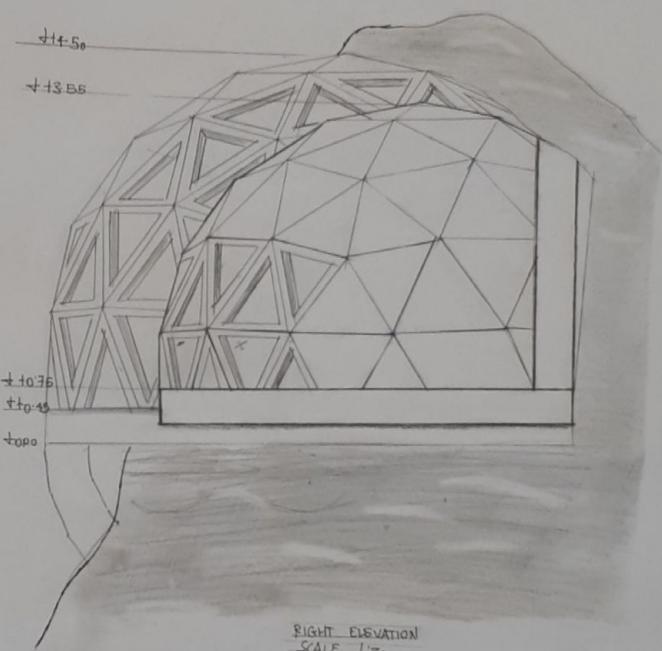
SECTION A-A'
SCALE 1:35



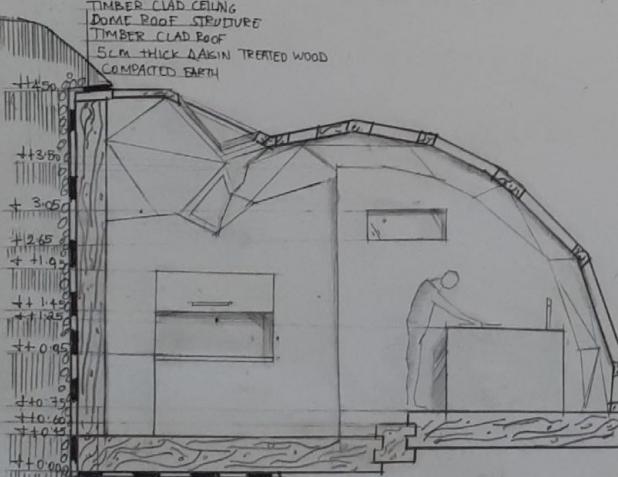
BACK ELEVATION
SCALE 1:35



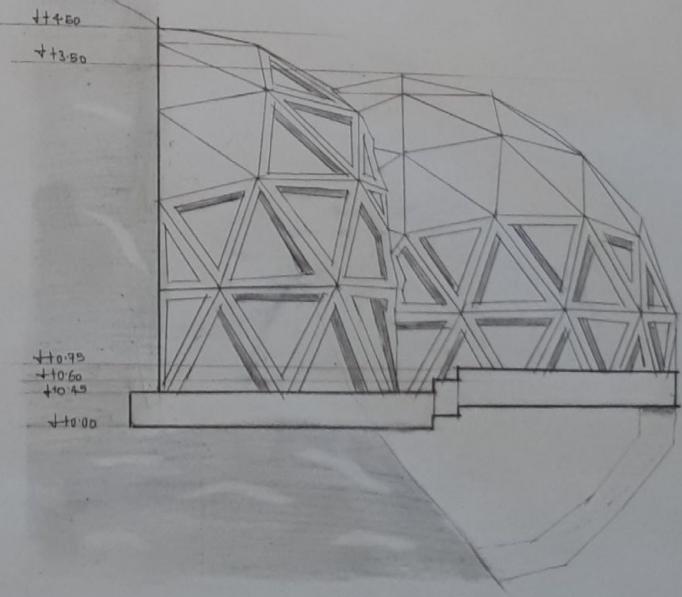
SECTION B-B'
SCALE 1:35



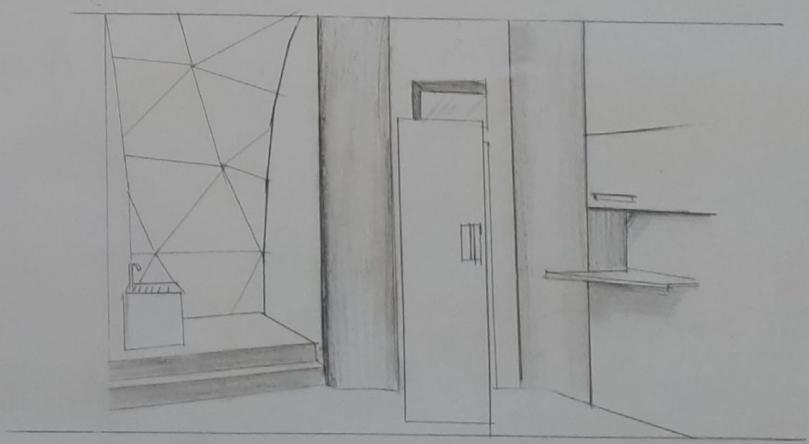
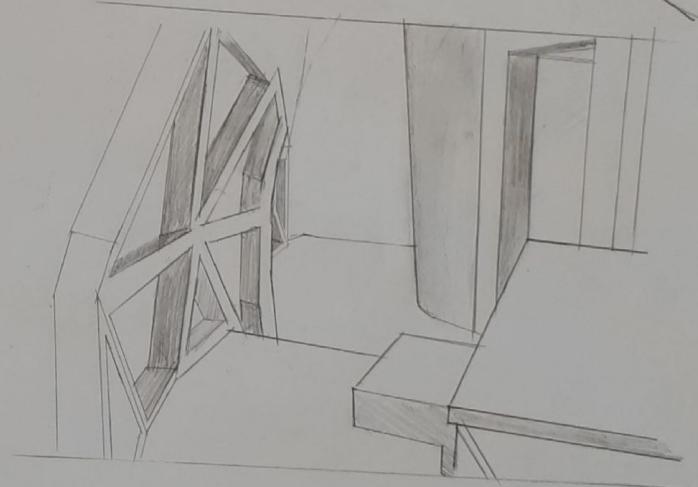
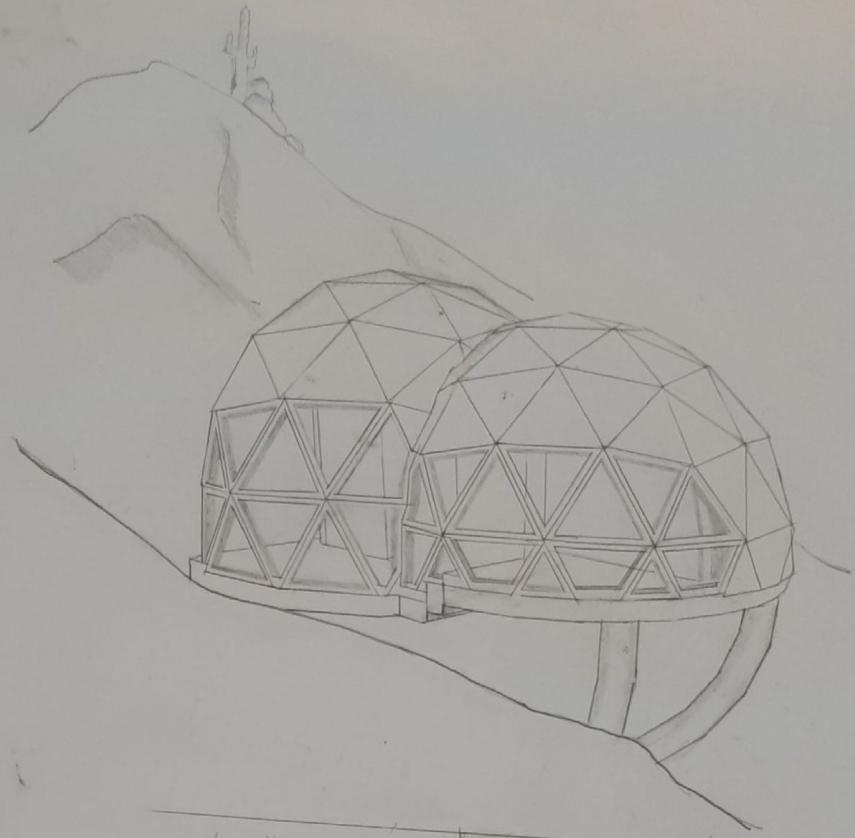
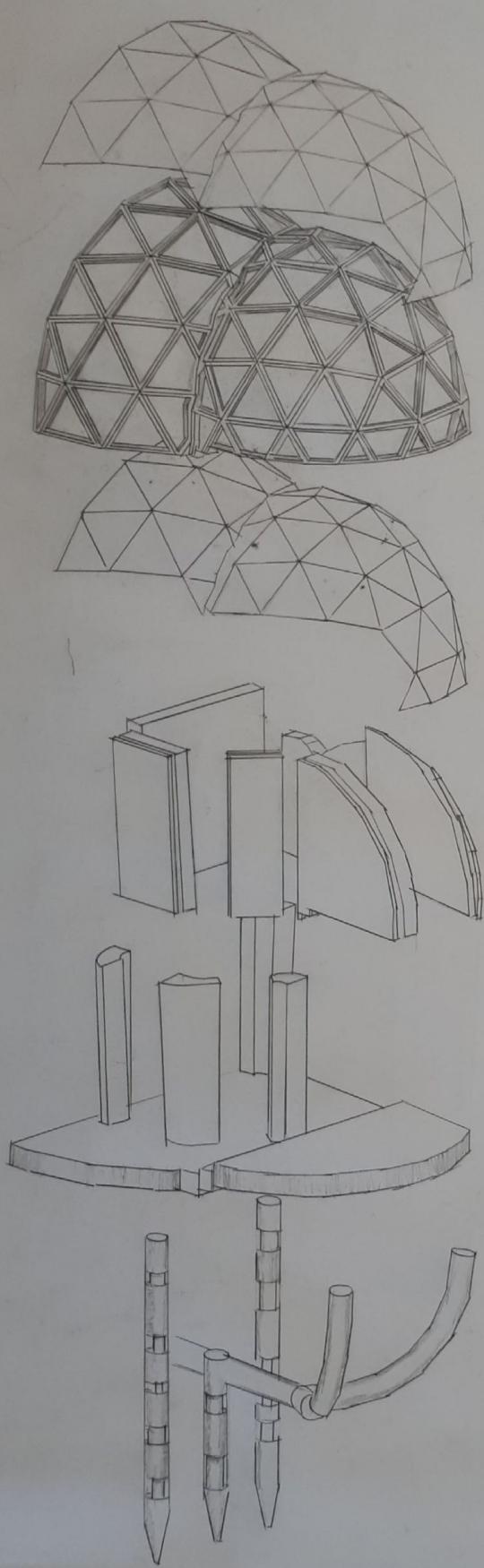
RIGHT ELEVATION
SCALE 1:35

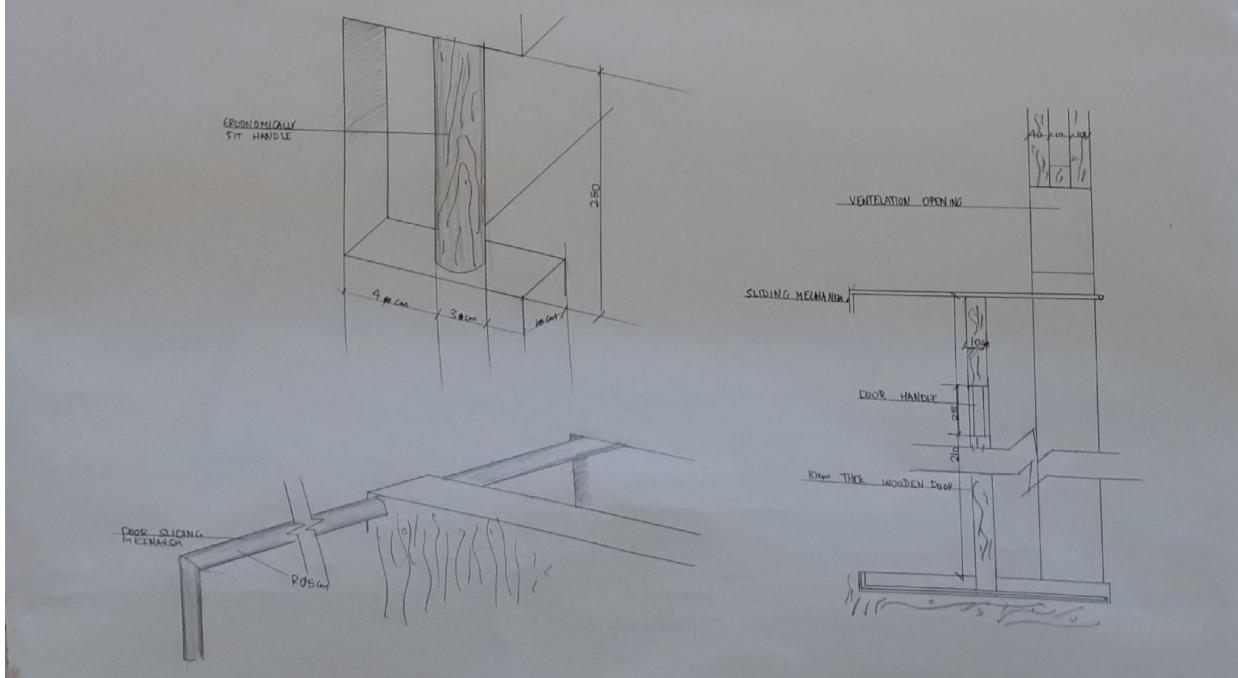
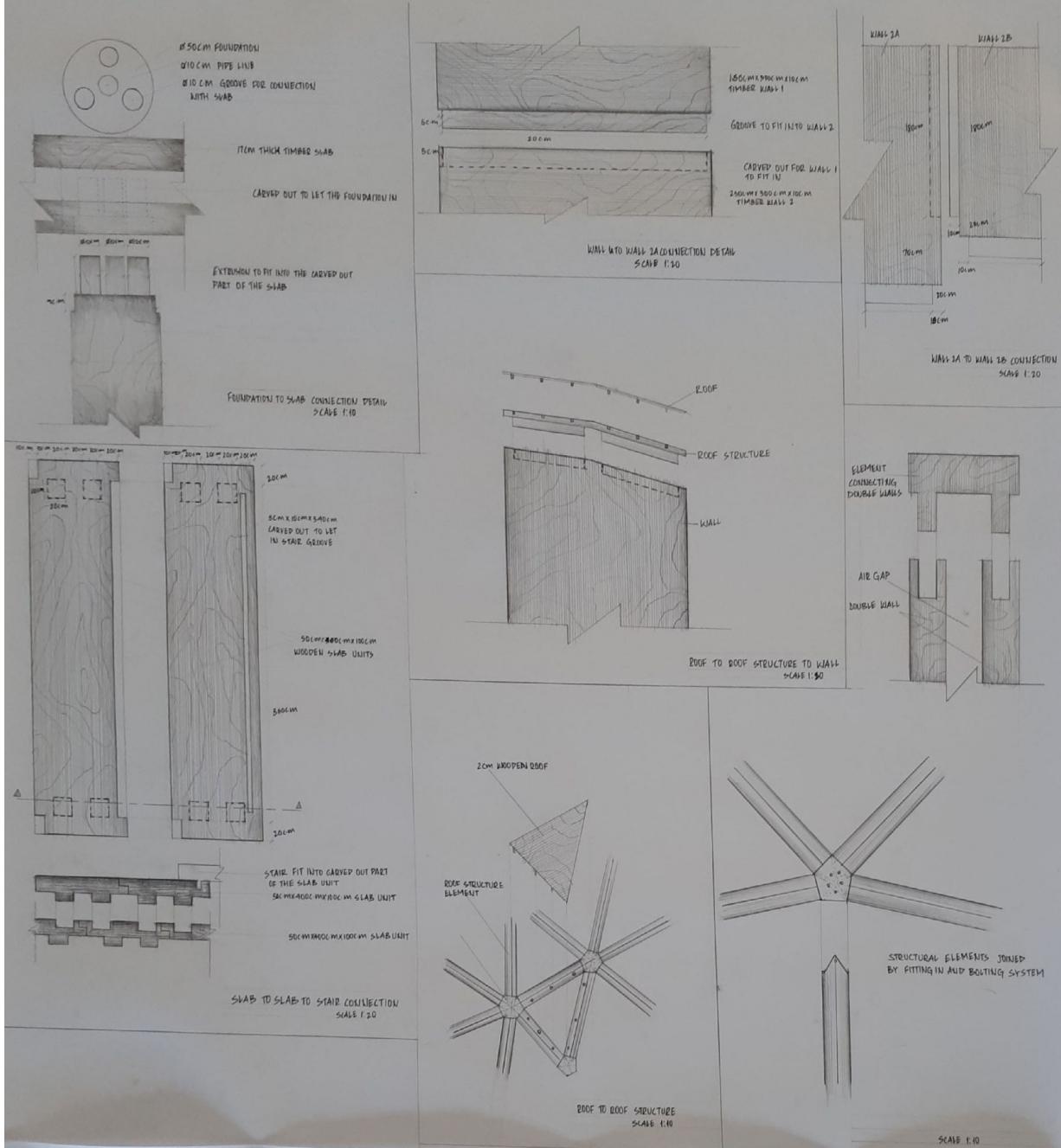


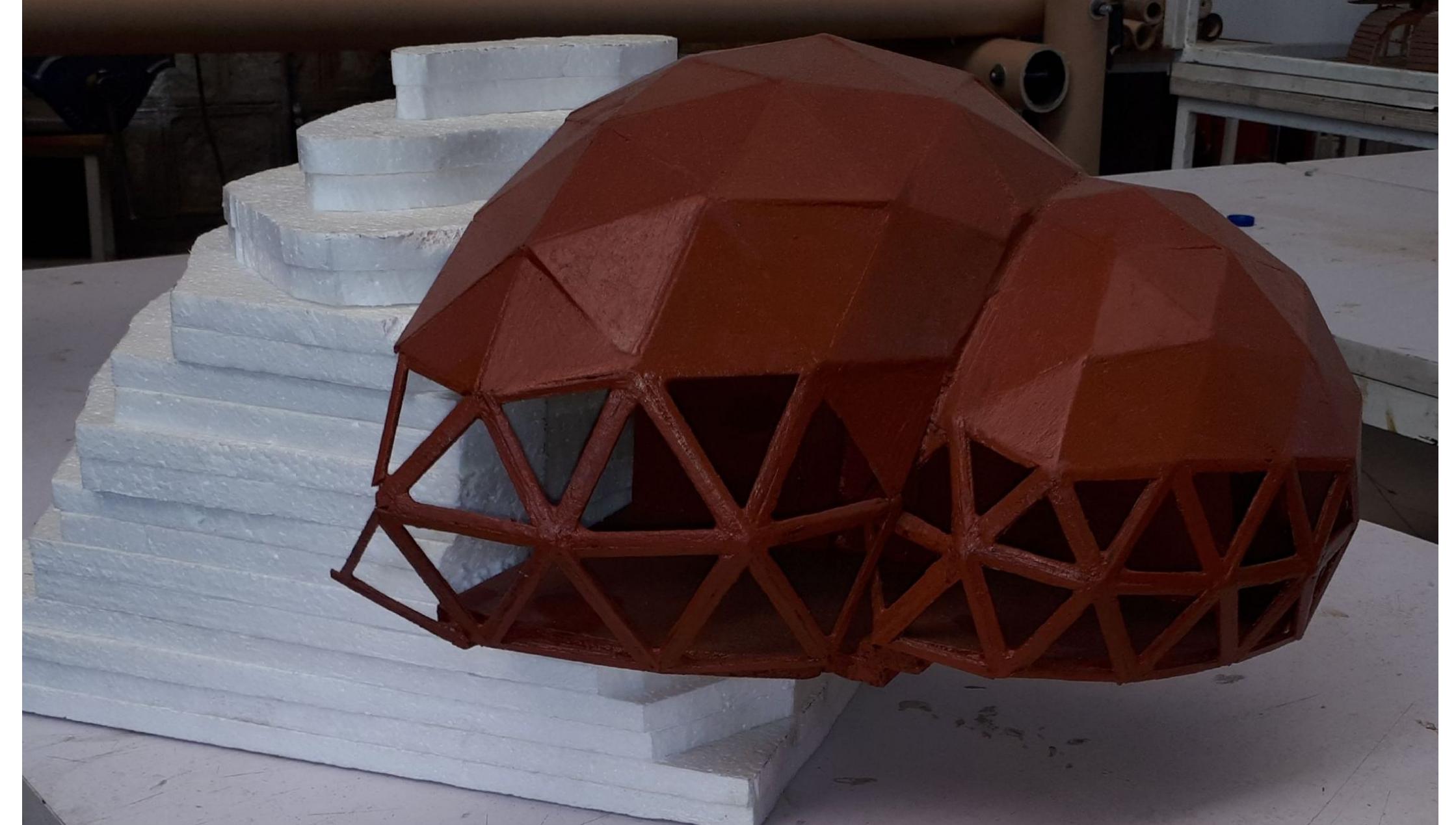
SECTION C-C'
SCALE 1:35



FRONT ELEVATION
SCALE 1:35









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